

UNIT IV

VEHICLE CARE, INSPECTION AND USE

A signed daily pre-trip inspection must be completed by the driver or designee prior to the school bus being operated. Each school bus driver must properly pre-trip and inspect the school bus to ensure it is in safe operating condition. A proper pre-trip inspection will ensure the safety of both the students and you the driver.

4.1 **MAINTENANCE and INSPECTION**

The driver is the person responsible for safe operation of the school bus. When something is wrong with the school bus the driver must report it – even if the driver does not know what is causing the problem. The maintenance department is responsible for diagnosis and correction of the problem. ALL drivers must have in their possession a signed pre-trip inspection report indicating the school bus is in safe operating conditions. All persons involved in the pre-trip inspection **MUST** sign the report. A thorough daily school bus inspection must be performed by the driver or designee. It shall consist of three distinct parts:

- a. a pre-trip inspection before the vehicle is driven;
- b. an operational inspection while the bus is being driven; and
- c. a post-trip inspection at the end of the route

4.2 **PRE-TRIP INSPECTION PROCEDURE (MN. Rule 7470.1300)**

NOTE: There are numerous teaching methods and ways to perform a proper pre-trip inspection. The information listed below is one example of the components of a pre-trip inspection. Further information is available by contacting:

- MAPT - www.mnapt.org/
- MSBOA - www.msboa.com/

A. Pre-trip Inspection:

1. While walking to your school bus, begin your visual inspection of the bus.
2. Interior inspection.
3. Under the hood.
4. Exterior inspection.

B. Interior Equipment Inspection:

1. Emergency equipment must be easily accessible and held securely in place.
2. Check the contents of the first aid kit and body fluid clean up kits.
3. Check the fire extinguisher to ensure it is fully charged.
4. Check for emergency warning triangles.
5. Check the driver's seat belt.
6. Check operation and adjustment of the driver seat.
7. Check operation of the horn.

8. Check the windshield wipers and washers.
9. Check the interior cleanliness of the windshield.
10. Check the condition and operation of the wiper blades.
11. Check the wiper motor and linkage operation.
12. Check the operating condition and visibility of all gauges. Note that attention should be given to these gauges for their proper function at all times when the engine is in operation.
13. Buses manufactured after January 1, 1995, must have the following items in addition to the above listed items:
 - a. An approved seat belt cutter if seat belts are present
 - b. 2-way radio communication or alternative.
14. Buses manufactured after January 1, 2008, must have an approved seat belt cutter.

C. Under the hood:

1. Open the hood and make sure that safety latch and hinge are in holding position.
2. Check oil level.
3. Verify the level of the antifreeze.
4. Check the power steering pump to see that it is securely mounted, the belt tension is good and the hoses are in good condition.
5. Check the power steering system to see that it is securely mounted and free of oil leaks.
6. Check the pitman arm to see that it is securely mounted.
7. Check the drag link to see that it is securely mounted.
8. Check the shock absorber to see that it is securely mounted and free of oil leaks.
9. Check the tie rod and tie rod ends for looseness.
10. Check the belt(s) for proper tension, cracks and frayed edge.
11. Look for any loose wires.
12. Check all hoses for leaks and bulges.
13. Check the underside of the bus for fluid leaks.
14. Close the hood and latch.

D. Tires and Wheels:

1. Check the tires for inflation and general condition.
2. Lug nuts must be checked for tightness. Rust trail(s) around the edge of the bolt or nut is a good indicator of a loose lug nut.
3. Check tire tread depth (4/32 front; 2/32 rear).

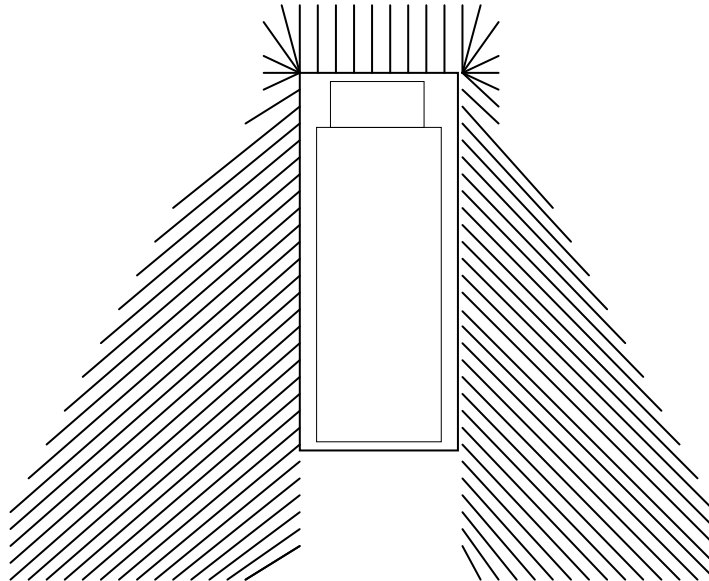
E. Emergency Exits:

1. Check the opening and closing of all emergency exits and doors.
2. Ensure the emergency buzzers are operating correctly.
3. Check for the proper seal on the emergency exit openings including the entrance door.

F. Mirrors:

1. Good visibility should always be maintained by keeping windows clean.
2. Check for cleanliness, cracks, flaking and securement.
3. Adjust mirrors according to the diagram below.

Critical area of vision for school bus



G. Windows:

1. Check for cleanliness.
2. Check for chips and cracks.
3. Check for operability.
4. Check for moisture (fogging) of the thermal pane.

H. View Underside of Bus:

1. Check for oil or grease leaks.
2. Check springs and hangers. There MUST be no cracked or broken leaves.
3. Check exhaust pipe and hangers.
4. Check shock absorbers for secure mounting and the absence of oil leaks.
5. Check that u-bolts are secure.
6. View condition of the frame.

I. Body:

1. Check for general conditions of the body, noting any damage.
2. Verify that all school bus markings are legible.
3. Check for protruding or sharp edges on the body, both of which pose a threat to entering / exiting students and pedestrians

J. Brakes:

1. Hydraulic brakes:

- a. The electrical brake motor must be heard with the brake applied and the key off.
- b. If the brake motor is not heard, do not operate the vehicle until the brake system is serviced.

2. Air brakes:

- a. Turn the ignition key to the on position
- b. Depress service brake
- c. Release the parking brake
- d. Check one-minute air loss with the service brake applied
 - i. Monitor for air loss
 - ii. Listen for air leaks
 - iii. No more than 3 psi air loss during the one minute checks.
- e. Pump the service brake until low-pressure warning signal comes on / or around 60 psi
- f. Continue to pump the brake until the emergency brake system comes on at 20 – 40 psi
- g. Start the engine and attempt to pull forward
- h. Place transmission in neutral
- i. Allow the air pressure to build up to fully charge the system
- j. Release parking brake
- k. Attempt to pull forward and stop the vehicle with the service brake
- l. Reapply parking brake

K. Bus Cleanliness:

1. Keep the step well free of ice and debris.
2. The bus must be swept daily and empty trash can.
3. All windows and mirrors should be kept clean. Remember, clean windows mean clear visibility.
4. The exterior should be kept clean.
5. Ensure your brake lights, turn signals, 8-way lamp system, and headlamps are clean and visible.
6. Check the condition of the seats and floors.

4.3 **POST-TRIP INSPECTION**

ALWAYS CHECK BUS FOR STUDENTS LEFT ON BUS!

During the post-trip Inspection the following items must be inspected. For further details, refer to section 4.2, "Pre-trip Inspection."

- A. Ensure no students are left on the bus by a thorough walk through.
- B. Follow your school district / company policies
- C. Check for personal items left on bus and vandalism.
- D. Close all windows and roof hatches.

- E. Fuel bus as required.
- F. Report any defects.
- G. Visual check of outside for any obvious problems.

4.4 SUMMARY:

Conducting a proper pre-trip/post-trip will ensure the bus is in safe operating condition and a student is never left behind.